**Quiz # 1 – Trigonometry**

* Communication counts – 1 equal sign per line, circle final answers

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| **Expectation** | **Level Achieved** |
| TG3 - solve problems using primary trigonometric ratios of acute and obtuse angles, the sine law, and the cosine law, including problems arising from real-world applications, and describe applications of trigonometry in various occupations |  |

1. For the following triangle, *LABEL* the sides with respect to angle A. Then state the three primary trigonometric **ratios** for angle A (ie: Sin A, Cos A and the Tan A)

You must find the length of the hypotenuse first.

**Do NOT solve for angle A.**

A

20 m

C

B

15 m

2. Use your calculator to evaluate each of the following. ***Round your answers to the******nearest thousandths****.*

a) sin 47o = b) tan 218o =

c) cos 210o = d) sin –1 (0.5) =

3. Find side “ k ” (round to **one decimal place**)

K

L

M

17.4 cm

21º

4. Find angle R to the **nearest degree**.

Q

P

4.7 mm

6.2 mm

R

1. **Solve** the following triangle.

Round all side lengths to the **nearest tenth** and all angles to the **nearest degree**.

7

57º

13

6. From the top of a cliff 278 m high, the angle of depression to a boat out at sea is 17º. How far is the boat

from the base of the cliff? *Include a labelled diagram with your solution.*

7. Determine the area of the triangle. . Accurate to the nearest ***tenth of a unit.***

6 cm

12 cm

8 cm

height

(h)